artistic works, vertically integrated MSOs are not demanding such exclusivity for their cable programming. The evidence is that cable programming networks, including those networks with ties to MSOs, have been made available to home satellite dish owners and MMDS systems. The specific findings that support this conclusion are:

a) Home satellite dish owners currently have access to a wide selection of cable programming, directly from the satellite channel or from a number of competing third-party packagers, at attractive prices.

b) Most cable programming networks, including all of the top 10 and 22 of the top 28 basic and premium networks in terms of subscribership, currently are provided to MMDS systems.

The evidence, therefore, clearly indicates that the net economic benefit of vertical integration in the cable industry is positive. Vertical integration benefits the viewing public by expanding programming availability while posing no current or likely future threat to competition. This implies that a Congressional regulatory response to vertical integration in the cable industry is not necessary. Any anti-competitive effects that arise in the future can be handled on a case by case basis by active enforcement of the existing antitrust laws. Rigid industry-wide rules to regulate vertical integration in the dynamic cable programming marketplace are likely to be harmful to consumers.

I. INDUSTRY BACKGROUND

A. Market Penetration of Cable Television

The cable television industry has been extremely successful in attracting new customers over the past decade. At the beginning of 1980 only about 20 percent of U.S. television households had cable service. Now, less than 10 years later, cable service is available to nearly 90 percent of the nation's TV households, and 60 percent of those households are purchasing cable service.[3] The cable penetration rate has grown to 54.8 percent, with the number of subscribers exploding to close to 50 million.[4] Cable has grown from an infant industry to an industry generating approximately $14 billion of revenue annually.[5]

Cable's dramatic success over the recent period has occurred because cable systems have been able to provide subscribers with original programming. As opposed to cable's early slow growth, from its inception in 1948 to the late 1970s, when the product was perceived as merely serving consumers who were unable to receive good reception of over-the-air broadcast television, the cable industry has become an effective competitor of broadcast television. Although

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[3] Paul Kagan Associates, Inc., Cable TV Programming, April 24, 1989, p. 4.

[4] A. C. Nielsen, Cable Penetration, February 1989.

[5] Paul Kagan Associates, Cable TV Investor, November 29, 1988, p. 9.

broadcast television still dominates viewing, cable's share of viewing has become significant.[6]

Specifically, many individuals that receive good quality reception of broadcast television are nevertheless now purchasing cable because of the programming available on cable. The introduction of information, entertainment and sports cable programming with superior consumer appeal has convinced a large number of individuals to pay a price for a service, television, that they otherwise can receive free of charge. Rather than being forced to watch the "mass market" media offered by the broadcast networks, cable viewers are able to choose from among a greater variety of narrower programming options. For many television consumers cable has become, in effect, a "video newsstand" which permits them to choose programming that appeals to their specific interests. Cable's continued success in retaining their customers and attracting new customers can only be accomplished by continued improvements in the quality and diversity of their programming offerings.

B. The History of Vertical Integration in the Cable Industry

Because the delivery of quality cable programming is essential to the success of a cable system, MSOs have not been merely passive purchasers of available "off-the-shelf" programming. In order to acquire new quality

[6]From 1982 to 1988 cable networks' share of television viewing rose from 14 percent to 22 percent, while the broadcast networks' share fell from 68 percent to 60 percent and the independent and public broadcast stations' share remained relatively constant at 23 percent. Source: A. C. Nielsen, published in Cabletelevision Advertising Bureau's Cable TV Facts, 1984-1989. (The total exceeds 100 percent due to rounding and multi-set usage.)

programming that will expand and complement their offerings, MSOs have also become actively involved in program supply by founding or investing in cable programming networks. The primary motivation for these efforts has remained the assurance of the availability of the programming necessary for the continued growth and success of the cable industry.

The connection between cable system operators and cable programming supply dates back to the establishment of the first cable programming network. In 1972 the Manhattan, New York cable system began the nation's first premium cable network, HBO, to supply alternative programming to its cable system subscribers. Both the cable system and HBO were later purchased by Time, Inc. In December 1975, Time, Inc. began a new era in cable programming when it began to deliver HBO via satellite to cable systems throughout the country. HBO's mixture of uncut movies and live sporting events gave cable systems the first opportunity to go beyond the retransmission of nearby broadcast stations' signals and offer cable subscribers original programming. This initiative by Time, Inc. is reflected in the growth of the network. By October 1988, HBO had the largest subscriber base of all of the premium channels, serving 15.9 million subscribers.[7]

The supply of cable programming during this period was not, however, limited to cable operators. In December 1976, approximately one year after HBO's conversion to satellite delivery, R. E. "Ted" Turner, who at the time had no connection to the cable industry, placed his Atlanta, Georgia broadcast

[7]National Cable Television Association, National Cable Network Directory, September/October 1988.

television station's (formerly WTCG, now known as SuperStation TBS) signal up on a satellite for distribution to cable systems nationwide.[8] Turner's superstation received only modest initial carriage. In fact, the superstation was initially carried by only four cable systems serving 24,000 subscribers.[9] However, during the first few years the service was available Turner's superstation, while continuing to remain independent of cable operator ownership, experienced a period of tremendous subscriber growth. By 1980 WTBS was being carried on 2,300 cable systems that served 9.3 million subscribers.[10] In June 1980 Turner debuted Cable News Network (CNN), a 24-hour, in-depth, news and information network. On CNN's launch date the service reached 1.7 million households.[11] Over the past nine years, CNN (like WTBS) has experienced significant subscriber growth.[12] In January 1982, Turner launched yet another 24-hour news service, Headline News, to complement programming shown on CNN. As was true with Turner's other cable networks, Headline News also gained significant cable carriage.[13]

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[8] Broadcasting, November 21, 1988, p. 42.

[9] Turner Broadcasting, "SuperStation TBS History," National Cable Forum Handbook, January 1989.

[10] National Cable Television Association, Cable Television Developments, October 1980, p. 4.

[11] Turner Broadcasting, "CNN History," National Cable Forum Handbook, January 1989.

[12] In October 1988 CNN was carried on 8,200 systems (including SMATV), serving 47.9 million subscribers. (National Cable Television Association, National Cable Network Directory, September/October 1988, p. 2.)

[13] Turner Broadcasting, "Headline News History," National Cable Forum, January 1989.

MSOs did not obtain equity participations in Turner's three successful cable networks until 1987, in connection with Turner's March 1986 purchase of the MGM studios (including the MGM library) for $1.7 billion.[14] In undertaking this endeavor, Turner undertook a substantial amount of debt ($1.5 billion). The facts indicate that the reason for the equity sale of Turner Broadcasting Systems to the MSOs was Turner's need for financial assistance to help pay off some of this debt.[15] Turner's initial problem was to ascertain how to pay off $600 million in short-term "extendable" notes which were due to mature in March 1987. In January 1987, with the deadline quickly approaching, Turner sold 35 percent equity of Turner Broadcasting Systems to a consortium of 14 cable MSOs and Kirk Kerkorian for $550 million.[16]

It certainly does not appear to be the case that Turner sold equity to the MSOs in order to gain cable carriage for his services. In fact, the evidence clearly illustrates that each of Turner's cable networks received widespread cable carriage <u>prior</u> to the equity sale. In January 1987, prior to cable operators' equity participation in Turner Broadcasting, WTBS was available to 38.5 million households, or 91 percent of the nation's cable subscribers, and CNN and Headline News reached 36.7 million and 22 million households (or 87 percent and 52 percent of the nation's cable subscribers), respectively.[17]

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[14] <u>Broadcasting</u>, March 31, 1986, p. 31.

[15] <u>Broadcasting</u>, January 26, 1987, p. 42.

[16] <u>Broadcasting</u>, January 26, 1987, p. 42.

[17] National Cable Television Association, <u>Cable Television Developments</u>, April 1987, p. 7. By October, 1988 WTBS reached 45.6 million households or 98 percent of cable subscribers, CNN and Headline News reached 47.9 million households, which represent over 100 percent of cable subscribers due to SMATV and MMDS subscribers. Headline News reached 32.6 million households, or approximately 70 percent of subscribers. (<u>National Cable Network Directory</u>, September/October

As stated in a June 1988 Department of Commerce study, this is merely an example of cable operators insuring that the services their subscribers want will continue to survive and prosper. "The cable industry's $550 million investment in Turner Broadcasting provided a much-needed infusion of capital to the latter firm, solidifying, among other things, the financial health of WTBS and CNN, two of the three largest cable networks."[18]

There are other cable networks that have been sustained by cable operator investments. For example, C-SPAN, which transports viewers to the floors of both houses of Congress, would probably not exist without financial support from the cable industry. The same may be true of other cable services."[19] For example, the Discovery Channel is another obvious example of a network which might have failed if not for cable industry investment. The Discovery Channel was launched in June 1985 without the financial assistance of cable operators, but it subsequently sold equity interest to a group of four MSOs (TCI, United, Cox, and Newhouse) in June 1986 in order to gain much needed capital.[20] The MSOs provided a total of approximately $10 million, for which each MSO was given 10 percent interest in the service.[21] The importance of the cable operators'

1988.) Since the sale of equity interest to the MSOs, Turner Broadcasting System successfully launched in October 1988 a new network, TNT. TNT currently reaches 26 million subscribers (National Cable Television Association, National Cable Network Directory, March/ April 1989, p. 11).

[18]National Telecommunications and Information Administration, Video Program Distribution and Cable Television: Current Policy Issues and Recommendations, U.S. Department of Commerce, June 1988, p. 91.

[19]Ibid., p. 92.

[20]Broadcasting, June 30, 1986, p. 32.

[21]Since their initial investment in the network, each of the MSOs have increased their equity interest to 14 percent.

investment is clearly evident, with at least one trade press report of the equity sale noting that the MSOs' investment "improv[ed] immeasurably the year-old service's chances of surviving."[22]

C. The Current Extent of Vertical Integration in the Cable Industry

Cable systems now provide their customers with a variety of television programming, including local and nearby signals from broadcast stations, the satellite delivered "superstations", a considerable line-up of "basic" services for which the subscriber pays no extra fee, and a number of "premium" channels which are available to individual subscribers for an extra monthly fee. Since over 80 percent of cable subscribers are served by systems having 30 or more channels,[23] cable's viewers enjoy a considerable selection of programming.

Table 1 shows the national satellite delivered cable programming networks currently available to cable operators and when the network began service.[24] The networks are broken into two categories -- those with no cable operator ownership or equity interest (Table 1.A) or those with a cable operator ownership or equity interest (Table 1.B).

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[22] Broadcasting, June 30, 1986, p. 32.

[23] Warren Publishing Inc., 1988 Television and Cable Factbook, Cable & Services Volume, p. C-359. Data as of April 1, 1988.

[24] Data sources for this table are presented in the Appendix, Table I.

Table 1.A

NATIONAL CABLE PROGRAMMING SERVICES WITH NO CABLE OPERATOR OWNERSHIP/EQUITY

Service	Began	Ownership
ACTS Satellite Network Television	5/84	Friends of ACTS (American Christian System), Radio and Television Committee of the Southern Baptist Convention
Alternate View Network	10/85	Alternate View Network
American's Value Network	3/87	Wholesale America Network
Cable Video Store	1/85	Jerrold Subscriber System Division of General Instrument Corporation
CBN Family Channel	5/77	Christian Broadcasting Network
Country Music Television	3/83	Privately held; leading investor is J. W. Guercio
The Disney Channel	4/83	Walt Disney Company
ESPN (Entertainment & Sports Programming Network)	9/79	Capital Cities/ABC (80%); RJR Nabisco (20%)
EWTN (Eternal Word Television Network)	8/81	Eternal Word Television Network
Family Guide Network	6/86	Family Guide Network
Family Net (formerly Liberty Broadcasting Network)	6/80	Liberty Broadcasting Network
Financial News Network (FNN)	11/81	Infotechnology
FNN/SCORE	4/85	Infotechnology
FNN/TelShop	8/86	Infotechnology
Galavision/ECO	10/79	Univisa Communications Group
Hit Video USA	12/85	Wodlinger Broadcasting Company
Home Shopping Network I	7/85	Home Shopping Network
The Inspirational Network	4/78	PTL, purchased by Stephen Mernick

Table 1.A

NATIONAL CABLE PROGRAMMING SERVICES
WITH NO CABLE OPERATOR OWNERSHIP/EQUITY
(Continued)

Service	Began	Ownership
International Television Network	1/88	World Television
KTLA	3/88	Tribune Broadcasting Company
KTVT	7/84	Gaylord Broadcasting Company
The Learning Channel (TLC)	10/80	ISN [100% owned by FNN] owns 48.8% of TLC; Appalachian Community Service Network owns 48.8%; remainder is owned by employees and others.
TNN (The Nashville Network)	3/83	Opryland USA Inc. (Division of Gaylord Broadcasting); service is marketed and distributed by Group W Satellite Communications.
National Jewish Television	5/81	NJT
The Playboy Channel	11/82	Playboy Enterprises
The Silent Network	2/84	Silent Network Inc. (private corporation)
TBN (Trinity Broadcasting Network)	4/78	Trinity Broadcasting Network
Univision (formerly SIN Television Network)	9/76	Hallmark Cards, Inc.; First Chicago Venture Capital
USA Network	4/80	MCA Inc. (50%); Paramount (50%)
The Weather Channel	5/82	Landmark Communications Inc. (privately held)
WGN	11/78	Tribune Broadcasting Company
WPIX	5/84	Tribune Broadcasting Company
WSBK	2/88	Gillett Communications Company
WWOR	4/79	MCA Broadcasting Inc.
Zap Movies (formerly Telstar)	11/86	Subsidiary of Satellite Corporation of America

Table 1.B

NATIONAL CABLE PROGRAMMING NETWORKS WITH CABLE OPERATOR OWNERSHIP/EQUITY

Service	Began	Ownership
A&E Cable Network (Arts & Entertainment)	2/84	Hearst Corporation (33-1/3%); Capital Cities/ABC (33-1/3%); NBC [GE] (33-1/3%)
AMC (American Movie Classics)	10/84	Rainbow Program Enterprises [Cablevision Systems 50%, NBC 50%] (50%); TCI (35%); United (15%)
BET (Black Entertainment Television)	1/80	Robert Johnson (52%); TCI (16%); HBO (16%); Great American Broadcasting [formerly Taft] (16%)
Bravo	2/80	Rainbow Programming Enterprises [Cablevision Systems 50%, NBC 50%]
CNBC (Consumer News and Business Channel)	4/89	NBC (50%); Cablevision Systems (50%)
CNN (Cable News Network)	6/80	Turner Broadcasting System; Ted Turner; other shareholders; cable consortium, including: ATC, TCI, United Artists, United Cable, Warner Cable; MSOs with an interest in TBS: Cablevision Systems, Continental, Heritage, Jones Intercable, Lenfest, Sammons, Storer, TCI-Taft, Times Mirror, TKR Cable, Viacom, Telecable, Centel, Telescripps (Scripps Howard)
C-SPAN I	3/79	Funding: 95% from cable affiliates; plus C-SPAN Fund, underwriting by corporations, organizations
C-SPAN II	6/86	Funding: 95% from cable affiliates; plus C-SPAN Fund, underwriting by corporations, organizations
Cable Value Network	5/86	CVN Companies; TCI (17.24%); Warner Cable; other MSOs that invested: American Cablesystems, ATC, Adam Corporation, Cablevision Systems, Colony, Continental, Cooke Cablevision, Daniels & Associates, Heritage, Newhouse, Rogers Communications, Sammons, Times Mirror, United Artists, United Cable, Viacom

Table 1.B

NATIONAL CABLE PROGRAMMING NETWORKS WITH CABLE OPERATOR OWNERSHIP/EQUITY
(Continued)

Service	Began	Ownership
Cinemax	8/80	ATC
The Discovery Channel	6/85	TCI; Cox; Newhouse; United Cable (14 percent each)
The Fashion Channel (TFC)	10/87	Class A and Class B stock offered -- TCI and United Cable Television Corporation together hold about 30% of the Class A Common; other MSOs purchasing stock include: Adelphia, American, ATC, Barden, Bresnan, Cablevision Industries, Centel, Century, Colony, Commonwealth, Continental, Cooke, Cox, Daniels, Enstar, First Carolina, Harron, Hauser, Heritage, Lenfest, Maclean Hunter, Marcus, Media General, Newhouse, Omega, Post Newsweek, Prestige, Sammons, Scripps Howard, Simmons, Susquehanna, Sutton Capital, Taft (Great American Broadcasting), TeleCable, Times Mirror, Triax, United Artists, United Video, Viacom, Warner
HBO	12/75	ATC
Headline News	1/82	Turner Broadcasting System; Ted Turner; other shareholders; cable consortium, including: ATC, TCI, United Artists, United Cable, Warner Cable; MSOs with an interest in TBS: Cablevision Systems, Continental, Heritage, Jones Intercable, Lenfest, Sammons, Storer, TCI-Taft, Times Mirror, TKR Cable, Viacom, Telecable, Centel, Telescripps (Scripps Howard)
Lifetime	2/84	Hearst/ABC-Viacom Entertainment Services [Hearst Corporation (33-1/3%), Capital Cities/ ABC (33-1/3%), Viacom (33-1/3%)]
Mind Extension University	11/87	Jones Intercable Inc.
MTV	8/81	Viacom (principal shareholder, National Amusements)

Table 1.B

NATIONAL CABLE PROGRAMMING NETWORKS
WITH CABLE OPERATOR OWNERSHIP/EQUITY
(Continued)

Service	Began	Ownership
The Movie Channel	12/79	Showtime Networks Inc.; Viacom (principal shareholder, National Amusements)
Movietime	7/87	80% owned by: ATC, Continental, Cox, Newhouse, United Cable, Warner Cable, Warner Communications, Home Box Office; 19% owned by Movietime management; 1% owned by Mabon Nugent (New York investment firm)
Nickelodeon	4/79	Viacom (principal shareholder, National Amusements)
NICK at Nite	7/85	Viacom (principal shareholder, National Amusements)
The Nostalgia Channel	2/85	Nostalgia Network Inc., MSOs offered equity with affiliation
QVC Network	11/86	QVC Network Inc. (65%); Comcast (14%); United and other cable operators (21%)
Request Television	11/85	Reiss Media Enterprises; companies involved include: American, Centel, Daniels,
Heritage,		United; major film studios; Warburg Pincus; Bill Daniels (Daniels & Associates); Norman Lear (Act III Communications); Jay Ricks (Hogan & Hartson); Robert Rosencrans
(Columbia		International Inc.); John Saeman (Daniels & Associates); Tom Wheeler (Media Enterprises Corporation)
Request Television 2	7/88	Reiss Media Enterprises
Shop Television Network	10/87	Joint venture between J. C. Penney and STN (Shop Television Network); MSOs with equity include: Cablevision Systems, Rogers, Continental, Warner
Showtime	7/76	Showtime Network Inc.; Viacom (principal shareholder, National Amusements)
SportsChannel America	1/89	Rainbow Program Enterprises (Cablevision Systems (50%), NBC (50%))

Table 1.B

**NATIONAL CABLE PROGRAMMING NETWORKS
WITH CABLE OPERATOR OWNERSHIP/EQUITY**
(Continued)

Service	Began	Ownership
SuperStation TBS	12/76	Turner Broadcasting System; Ted Turner; other shareholders; cable consortium, including: ATC, TCI, United Artists, United Cable, Warner Cable; MSOs with an interest in TBS: Cablevision Systems, Continental, Heritage, Jones Intercable, Lenfest, Sammons, Storer, TCI-Taft, Times Mirror, TKR Cable, Viacom, Telecable, Centel, Telescripps (Scripps Howard)
TNT (Turner Network Television)	10/88	Turner Broadcasting System; Ted Turner; other shareholders; cable consortium, including: ATC, TCI, United Artists, United Cable, Warner Cable; MSOs with an interest in TBS: Cablevision Systems, Continental, Heritage, Jones Intercable, Lenfest, Sammons, Storer, TCI-Taft, Times Mirror, TKR Cable, Viacom, Telecable, Centel, Telescripps (Scripps Howard)
The Travel Channel	2/87	Originally owned by TWO Marketing Services (TWA Airlines); offered stock totalling 37% of company. Companies taking equity include: Adelphia, Americable, ATC, Benchmark Communications, Cable America, Cablevision Industries, Cencom, Centel, Comcast, Falcon Cable, Galaxy Cablevision, James Communications, Lenfest, Maclean Hunter, Media General, Newhouse, Rifkin & Associates, St. Louis Cable, Scripps Howard, Service Electric, Sonic Communications, Telecable, Teleponce, Triax Communications, United Artists, United Video, U.S. Cable, Wometco Cable; MSOs purchased 8% of shares offered.
VH-1	1/85	Showtime Networks Inc.; Viacom (principal shareholder, National Amusements)
Viewers Choice 1	11/85	Pay Per View Network [Viacom owned Viewers Choice; Viewers Choice merged with Home Premiere Television which was owned by the Pay Per View Network: ATC, Continental, Cox, Newhouse, Telecable; Viacom is now a partner as well]

Table 1.B

NATIONAL CABLE PROGRAMMING NETWORKS
WITH CABLE OPERATOR OWNERSHIP/EQUITY
(Continued)

Service	Began	Ownership
Viewers Choice 2	6/86	Pay Per View Network [Viacom owned Viewers Choice; Viewers Choice merged with Home Premiere Television which was owned by the Pay Per View Network: ATC, Continental, Cox, Newhouse, Telecable; Viacom is now a partner as well]
VISN (Vision Interfaith Satellite Network)	9/88	National Interfaith Cable Coalition (nonprofit organization); [TCI was instrumental in early organization of participating groups]

Examination of this table reveals several things about the cable programming industry.

- First, there are a significant number of cable networks which are of substantial importance that have no ownership links with MSOs. For example, ESPN, a basic network which serves almost every cable household, has no ownership connection with any cable operator. (ESPN is owned primarily by a broadcast network, CapCities/ABC.)

- Secondly, among the programming networks which do have ownership links to MSOs, the nature of the links varies considerably from network to network. For some networks the links with cable operators are quite diffuse. For example, several programming networks (CNN, Superstation TBS, CNN/Headline, and Cable Value Network) have a broadly based cable operator ownership participation, with each MSO owning a relatively small share of the network.[25] Other networks are wholly owned by one or a few MSOs (such as Viacom's ownership of Nickelodeon). Finally, some networks have both MSOs and non-MSOs (many of which have other entertainment interests) as part owners. This pattern of mixed ownership is quite common throughout the cable programming business.

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[25]TCI has the largest cable operator share of the Cable Value Networks, 17.2 percent; while Time, Inc. (ATC) has the largest cable operator voting share of the Turner networks at 5.1 percent.

Table 2 below focuses on the vertical connection, if any, between the largest (in terms of subscribership) cable programming networks and MSOs. The table lists the 20 largest basic programming networks and the eight largest premium networks,[26] the number of subscribers to each network and any MSO with an ownership or equity interest in each of the networks. All non-MSO ownership interests in the networks, such as CapCities/ABC's 33 percent interest in Lifetime or GE (NBC) and CapCities/ABC's respective 33 percent interests in the Arts & Entertainment Network, are ignored.

As we can see, three of the top five basic networks (ESPN, USA Network and CBN Family Channel) have no cable operator connection. The other two basic networks in the top five (CNN and SuperStation TBS) have large groups of cable operators with ownership connections. The Nashville Network, The Weather Channel, Financial News Network and WGN are other basic networks with no MSO ownership interests and the Disney Channel is an important premium channel with no MSO ownership interests. Among the vertically integrated MSOs Viacom has important ownership interests in some of the remaining basic networks (MTV, Nickelodeon, Nick at Nite, VH-1 and Lifetime (with Hearst)) and two premium movie networks (Showtime and The Movie Channel). Hearst has an ownership interest in A&E in addition to Lifetime. ATC's parent Time, Inc., owns HBO and Cinemax, an equity interest in the Turner networks and, with TCI, a minority interest in Black Entertainment Television. Cablevision Systems has a position in AMC, Bravo, a minority interest in the Turner networks and CVN and a position in the recently launched CNBC.

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[26]Included as premium networks are those networks, such as American Movie Classics, Bravo and Galavision, that are sometimes carried as basic networks.

Table 2

VERTICAL CONNECTION BETWEEN CABLE PROGRAMMING NETWORKS AND CABLE SYSTEM OPERATORS

Programming Network	Subscribers (millions)	MSOs with Ownership/Equity Interest in Network
A. Basic Services		
ESPN	48.8	None
CNN	47.9	TCI, United Artists, United Cable, Warner Cable, Cablevision Systems, Continental, Heritage, Jones Intercable, Lenfest, Sammons, Storer, Times Mirror, TKR Cable, Viacom, Telecable, Centel, ATC, Scripps Howard (Telescripps)
SuperStation TBS	45.6	TCI, United Artists, United Cable, Warner Cable, Cablevision Systems, Continental, Heritage, Jones Intercable, Lenfest, Sammons, Storer, Times Mirror, TKR Cable, Viacom, Telecable, Centel, ATC, Scripps Howard (Telescripps)
USA Network	45.2	None
CBN Family Channel	42.7	None
MTV	42.6	Viacom
The Nashville Network	42.0	None
Nickelodeon	41.4	Viacom
Lifetime	39.9	Viacom (33 percent), Hearst (33 percent)
C-SPAN	39.0	(1)
Nick at Nite	37.1	Viacom
The Weather Channel	36.0	None
A&E Cable Network	36.0	Hearst (33 percent)
The Discovery Channel	35.8	TCI, Cox, Newhouse, United Cable
CNN/Headline	32.6	TCI, United Artists, United Cable, Warner Cable, Cablevision Systems, Continental, Heritage, Jones Intercable, Lenfest, Sammons, Storer, Times Mirror, TKR Cable, Viacom, Telecable, Centel, ATC, Scripps Howard (Telescripps)

(1) Cable affiliates provide 95 percent of the funding for C-SPAN, but have no ownership or program control interests.

Table 2

VERTICAL CONNECTION BETWEEN CABLE PROGRAMMING NETWORKS AND CABLE SYSTEM OPERATORS
(Continued)

Programming Network	Subscribers (millions)	MSOs with Ownership/Equity Interest in Network
A. Basic Services (continued)		
Financial News Network	32.0	None
Video Hits-One	28.0	Viacom
WGN	24.9	None
Black Entertainment TV	20.7	TCI (16 percent), ATC (16 percent)
Cable Value Network	20.4	TCI (17 percent), Warner Cable, ATC, Cablevision Systems, Colony, Continental, Cooke Cablevision, Heritage, Newhouse, Rogers Comm., Sammons, Times Mirror, United Artists, United Cable, Viacom, Daniels & Associates, Adam Corporation
B. Premium Services		
American Movie Classics*	12.0	Cablevision Systems (25 percent), TCI (35 percent), United Cable (15 percent)
Bravo*	1.3	Cablevision Systems (25 percent)
Cinemax	5.1	ATC
The Disney Channel	3.8	None
Galavision*	1.8	None
Home Box Office	15.9	ATC
Showtime	8.9**	Viacom
The Movie Channel	8.9**	Viacom

*These three networks, although often offered at a separate charge, are more and more frequently offered as part of basic service.

**Subscribership count combined for Showtime and The Movie Channel.

Source for Subscriber Data: National Cable Television Association, National Cable Network Directory, September/ October 1988. SMATV and MMDS subscribers included in network subscriber counts.

D. Economic Benefits of Vertical Integration

The diverse ownership pattern among cable programming networks suggests that there is no single best organizational form for the provision of cable programming. However, one should not conclude from this that ownership patterns are of no importance. The evolution of MSO ownership of cable networks suggests that in some cases important programming might not have been available without MSO involvement. Although it is not the case that vertical links with MSOs are inevitable, the history of the cable industry is such that there appears to be significant efficiencies generated in particular cases by vertical integration. These efficiencies have resulted in the establishment and preservation of new cable networks and in a corresponding increased availability of programming choices for television consumers.

Vertical integration provides several advantages to both the cable program network and the cable operators. Among the advantages of vertical integration are an improved flow of information about viewers' tastes, their reactions to programs and their desires for new programs. Since the key to increased cable penetration is increased quality and diversity of basic cable programming services, the MSOs have a desire to see such programming services developed. MSOs are likely to be able to contribute to the successful introduction and efficient operation of a basic programming service network because of their knowledge of the cable industry and of viewer tastes. MSOs are likely to know what cable viewers want and what niches are being missed in the current programming schedules, thereby facilitating the development of programming better tailored to their viewers. Further, MSOs with some programming interests are likely to possess specialized knowledge regarding how to create, market and distribute cable programming. It would be difficult and inefficient to write an arms-length market contingent contract between, say, a program supplier in the entertainment industry and an MSO in the cable industry which facilitates effective transfer of this knowledge. A partnership allows the various talents possessed by the two firms to be flexibly combined in a cooperative relationship where each firm can take advantage of the other's field of expertise while reducing the market transaction costs involved in a more arms-length relationship.[27]

MSOs also can take advantage of their superior information to efficiently provide financing to new cable programming networks. An MSO who will utilize a potential network's programming is often in a better position to judge the ultimate probability that a network will be successful than less informed commercial banks and other financial sources. Financing network development through an MSO, therefore, is a less costly source of funds, resulting in the availability of programming which might otherwise never reach maturity.[28]

All of these advantages of vertical integration ultimately benefit the viewing public because they are likely to result in an expansion of the programming that is available to the public and to increased consumer

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[27] See, for example, Williamson, "Transaction Costs in Antitrust Policy," 122 U. Pa. L. Rev. 1400, 1445 (1974) for a discussion of how ownership links reduce transaction costs.

[28] For a further discussion of the benefits of vertical integration in the cable industry, see NTIA Report 88-233, "Video Program Distribution and Cable Television: Current Policy Issues and Recommendations," U.S. Department of Commerce at 90-92.

satisfaction. Once this programming is created, it is in everyone's interest to have it carried as widely as possible. Since MSOs have nonoverlapping franchise areas and typically are not in direct competition with one another, an MSO would have nothing to gain by preventing a network that it had an ownership interest in from being carried by other cable operators. The network gains additional subscription fees and advertising revenue, and the other cable operators gain revenues from the additional subscribers the new programming attracts.

It is best to think of the process in two steps: First, by the information transmission and financing assistance that ownership encourages, the MSO helps to create programming which will attract additional subscribers to its own cable systems. Second, as we shall see, this programming, once created, is made available to other distribution outlets (including cable and non-cable outlets) who, by sharing its cost, reduce the cost borne by the original MSO.

II. POTENTIAL ANTICOMPETITIVE EFFECTS OF VERTICAL INTEGRATION

Antitrust concern with vertical integration focuses upon the problem of foreclosure. Briefly, the concern is that vertical integration may allow a firm to foreclose competition by denying a potential competitor access to an output market or access to a needed input. A firm, for example, may use its market power in a "downstream" activity (an economic activity closer to the final consumer -- in this case the cable system) to foreclose entry into the "upstream" activity (programming) or, alternatively, use its market power in the "upstream" activity (programming) to foreclose entry into the "downstream" activity (cable distribution). In this way a firm with market power on one level can protect and perpetuate its market power, keeping consumer prices up at anticompetitive levels.[29]

Foreclosure theory is well grounded in industrial organization economics and is a useful policy tool. For example, a recent case of competition foreclosure can be found in the relationship between AT&T and competing long distance carriers prior to the AT&T divestiture. Without access to the local area switching networks controlled by the local AT&T operating companies, competing long distance carriers were at a great competitive disadvantage.[30] The

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[29]This "foreclosure" falls into the broader category of "raising rivals' costs." For a more general discussion, see T. G. Krattenmaker and S. C. Salop, "Anti-Competitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price," 96 Yale L. J. 209-295 (1985).

[30]Prior to the break-up of AT&T, competing carriers had gained some access to the local exchanges through regulatory and judicial actions. However, the access was far from "equal" as customers of the competing carriers had to dial as many as 31 digits to complete a call.

importance of divestiture as part of the AT&T Modified Final Judgment reflects acceptance by the court and antitrust authorities of the foreclosure theory, because it was considered necessary to break the link between the local Bell operating companies and the Long Line Division in order to encourage entry of competing long distance carriers.

Although foreclosure theory is a useful policy tool, the theory by itself cannot demonstrate anticompetitive effect without the appropriate real world evidence from the case actually at hand. The necessary conditions which must be satisfied before a firm can engage in anticompetitive foreclosure include at least the following: 1) the input in question must be necessary in order for the potential entrant to compete; 2) the crucial input must be controlled by a vertically integrated competitor; 3) the competitor must deny the crucial input to potential new entrants; and 4) new entrants cannot feasibly provide their own supply of the crucial input or induce the entry of non-integrated suppliers of the crucial input.

Two kinds of potential anticompetitive foreclosure are considered in connection with vertical integration in the cable industry. The first is foreclosure of new programming networks. The crucial input is the ownership of cable operating systems and the anticompetitive foreclosure theory entails the integrated MSO refusing carriage on their systems to new programming networks in order to protect the established programming networks in which they have an ownership interest. The second is foreclosure of alternative noncable distribution technologies. The crucial input is the cable programming and the anticompetitive foreclosure theory entails the integrated MSO denying access to their programming to alternative distribution technologies in order to protect its interest in the cable system. Each of these types of foreclosure are discussed below.

A. Foreclosing the Entry of New Programming Networks

The first competitive concern is that an MSO vertically integrated into programming will use its ownership position in cable operating systems to foreclose the entry of new cable programming networks by refusing to carry any new programming networks in which the MSO does not have an ownership position. As we shall see, this anticompetitive scenario does not fulfill the four necessary criteria which must be satisfied before a firm can engage in anticompetitive foreclosure.

1. <u>Absence of Control of a Crucial Input</u>

Although access to cable operating systems is a crucial input for a potential entrant into cable programming (condition (1) is fulfilled), this critical input is not controlled by any individual vertically integrated MSO (that is, condition (2) is not satisfied). Table 3, which lists the four most important vertically integrated MSOs, illustrates that no MSO controls a sufficient number of cable systems to be able to foreclose entry into cable programming. Consider, first, the case of the cable operator Hearst. Although Hearst has ownership interests in two important cable networks -- Arts & Entertainment and Lifetime, it is not included in Table 3. Since Hearst only